ABSTRACT OF THE DISCLOSURE

A massive packet transmitter in a WAN (wide area network) . The transmitter includes: an encoder for segmenting packets for transmission through the WAN into messages having a predetermined length, encoding the respective segmented messages, adding a parity bit to each encoded message to make it into a codeword, and transmitting the codeword/ A decoder is used for receiving the codeword from the encoder through the WAN, correcting an error of the corresponding codeword, and removing a parity bit included in the corresponding codeword to recover the codeword to an original message. Errors generated when transmitting massive packets through the WAN are removed using a FEC method, and massive packets such as a IPv6 jumbogram can be used without errors in the WAN.